



RCA Amateur Radio Club

Indianapolis, IN

www.w9rca.org



MARCH 2022

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE TUESDAY, MARCH 8th, 6:30 PM AT NORTH SIDE EVENTS, IN THE GAME ROOM, FORMERLY THE KNIGHTS OF COLUMBUS, 2100 EAST 71st, INDIANAPOLIS, IN

RCA ARC NEWS

FEBRUARY MEETING SUMMARY – Thanks to all who attended the February meeting. Jim AF9A reported there is no new information on whether or not there will be an Indy Hamfest this July. The '88 repeater has performed well during the last month or so since the new batteries for the UPSs were installed. Power line glitches had caused various problems over the few months before the new batteries were installed. Thanks John, KF9UH. Our Club will participate again with the Indy United FD Club. The first planning meeting of 2022 is expected to take place in March. The Club has paid yearly dues to the Indiana Repeater Council.

AMATEUR RADIO LICENSE TEST SESSION

Date: Saturday, March 12, 2022
Time: Starting at 12:00 pm **by appointment only.**
Location: Salvation Army EDS Training Facility, 4020 Georgetown Rd
Indianapolis, IN 46254-2407
Required: FRN and completed form NCVEC 605.
Contact: Jim Rinehart, k9ru@arri.net, 317 721-1458

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Mar 5-6	ARRL DX Phone - http://www.arri.org/arri-dx
Mar 12	Wabash Valley ARA Bunny Fest, Clay County 4-H Fairgrounds, 6550 North State Road 59, Brazil, IN https://www.w9uuu.org/hamfest.php
Mar 19-21	BARTG RTTY - http://www.bartg.org.uk/
Mar 26-27	CQ WPX SSB - https://www.cqwpix.com/
April 2	Columbus Hamfest – 8AM to Noon Bartholomew County Fairgrounds, 750 W County Rd 200S. http://https://www.carnet.net

An expanded, downloadable version of QST's [Contest Corral](#) is available as a PDF. Check the sponsors' website for information on operating time restrictions and other instructions.

NATIONAL WEATHER SERVICE SPOTTER TRAINING You are no doubt aware that the National Weather Service provides spotter training every year. This training is available to anybody interested in learning more about severe weather and weather spotting. This year there is only 1 in-person training session in Marion County at 201 North Shadeland Ave on March 16th at 6pm.

Pre-registration is now required, they have limited space so you will want to register while you can. Here is the link: <https://www.google.com/url?q=https%3A%2F%2Fwww.eventbrite.com%2F259422288047&sa=D&ust=1646584952116000&usg=AOvVaw1OyNLmXam5iRLAgZQVoJ53>

There are a handful of virtual training sessions offered in surrounding counties. You can find virtual training dates, and more at www.weather.gov/ind/spotter

73 and stay Weather Aware – Matthew W9SOX, Marion County ARES, Marion County AR Skywarn

INDY UNITED 2021 FIELD DAY EFFORT Martinsville Reporter-Times recently ran a story about the Indy United 2021 Field Day Effort. The story of our 2021 Field Day performance, which carried us to 2nd place overall and an all-time Indiana scoring record (19,666 points), was recently recounted in the Martinsville Reporter-Times:

<https://www.reporter-times.com/story/news/local/2022/01/28/indy-united-amateur-radio-club-american-radio-relay-league-morgan-county/9210946002/>

The Reporter-Times is the hometown newspaper for Morgan County, which encompasses our Field Day site, the Victor Conservation Club near Centerton, IN. The author, Grace Phillips, also wrote about us a couple of years ago and even added 2 points to our score, working Texas as a guest operator on the GOTA station. --W9IND

AMATEUR RADIO IN UKRAINE ORDERED OFF THE AIR IN STATE OF EMERGENCY

A state of emergency was declared in Ukraine just prior to the Russian military invasion. Among other things, the February 24 decree from President Volodymyr Zelensky will remain in effect at least for 30 days and may be extended. As published on the website of the Verkhovna Rada, Ukraine's unicameral legislative body, the state of emergency includes regulation of TV and radio activities and "a ban on the operation amateur radio transmitters for personal and collective use."

The decree also imposes a ban on mass events and on strikes and authorizes checking the documents of citizens, and if necessary, conducting searches on persons, vehicles, cargo, office space, and housing. A curfew could be imposed. "The situation changes rapidly," IARU Region 1 Secretary Mats Espling, SM6EAN, said. "IARU Region 1 continues to monitor the development and expect all radio amateurs to follow their national laws and regulations."

DAYTON HAMVENTION LOOKS TO BE A GO FOR 2022

Hams and vendors hoping to attend Dayton Hamvention® 2022 have been asking what, if any, COVID-19 regulations will be in place at the event. Hamvention management says it's monitoring the situation closely. Hamvention General Chairman Rick Allnutt, WS8G, issued a statement:

"We strongly anticipate that Hamvention 2022 is a go. We cannot guarantee what government may decide about unknown changes in the pandemic. It has become obvious that the State of Ohio is very unlikely to call a halt to large gatherings anytime soon. Despite a recent large spike in [Omicron-variant] COVID cases and hospitalizations, there is no move to restrict large indoor or outdoor events such as sports events," Allnutt said.

Allnutt added that he anticipates that the official state guidance may be to recommend -- not require -- face masks and social distancing, but does not expect to be checking attendees' vaccination status on site. Hamvention will support state guidance.

Some have asked whether COVID-19 testing will be available at Hamvention. At this time, there are no plans to have testing on site. Updates on Hamvention and COVID-19 regulations related to the event will be posted on the [Hamvention website](#).

Hamvention, an ARRL-sanctioned event, will be held May 20 - 22, at the Greene County Fairgrounds and Expo Center in Xenia, Ohio.

CUTTING-EDGE TECHNOLOGY ON DISPLAY AT HAMCATION 2022

While many ham radio show visitors come for the flea market and a chance to chat with the various vendors, at least a few come to display new technology of the sort that will become mainstream in the amateur radio community going forward. Michelle Thompson, W5NYV, the CEO of Open Research Institute ([ORI](#)) attended Orlando HamCation -- also the 2022 ARRL National Convention on February 10 - 13 -- to promote the breadth of projects from ORI. She says the door is always open for additional participants.

Visitors to the ORI booth were treated to an update on ORI's successful DVB-S2X digital satellite television standard modem work and progress on the end-to-end demonstration of the entire satellite transponder chain. "At Open Research Institute, it doesn't work until it works over the air," Thompson told ARRL. "The Phase 4 Digital Multiplexing Transceiver [satellite] project is on budget, on track, and highly likely to succeed. The return on investment is high." She notes that the team continues to work toward innovating, publishing, and enabling high-tech space and terrestrial amateur radio work.

The [M17 Project](#) booth right next to ORI's represented "the future of amateur radio," Thompson said. M17 is developing a new digital amateur radio protocol for data and voice. "Ed Wilson, N2XDD, and Steve Miller, KC1AWV, from M17 brought working hardware, firmware updates, and also demonstrated several different software implementations throughout the weekend," she said. "M17 held their weekly net on Friday live from the booth, gave away stickers, magnets, and pins, and captured the hearts of all who visited."

AmbaSat-1 "re-spin" was another frequent topic of conversation, Thompson. The project is a crowd-sourced Low Earth Orbit (LEO) satellite program. AmbaSat-1 is a tiny [space satellite kit](#) that you assemble and code yourself. "The five AmbaSat boards from ORI, which operate at 70 centimeters, have been distributed to the firmware team, and they have begun development and are seeing success in university and hobbyist labs," she reported. "The goal is to create a compelling application, put the hardware on a sounding rocket, apply for a launch license, and send this project into space in a way that makes the amateur community proud."

Thompson was also among the presenters participating in the ARRL Technology Academy, which was one of four all-day workshops organized for the ARRL National Convention program held on February 10. Her talk on Digital Communications Technology was met by a "a positive, enthusiastic, and engaged audience" and she hopes that ARRL will continue sponsoring similar events.

She invited M17 principals to speak about their work, and opened the floor for questions and comments from the many highly competent and curious technical hams that were in attendance. Subjects covered ranged from asynchronous computing to concatenated coding.

Thompson recognized ARRL for its attention on amateur satellites throughout the convention. "ARRL set the pace this year for satellite talks and satellite demonstrations, with a [video](#) providing practical examples of amateur satellite operations," she said. In the video, ARRL members Tom Gaines, Jr., KB5FHK, and Sloan Davis, N3UPS, lead viewers through making an amateur satellite radio contact from the fairgrounds parking lot. One of their satellite contacts was with Patrick Stoddard, WD9EWK, who gave a tutorial on amateur satellite operations in the ARRL Hands-On *Handbook* workshop.

Thompson said ORI is looking forward to returning to in-person events, such as the well-attended DEFCON in August. The next virtual event for ORI will be the QSO Today Virtual Ham Expo,

March 12 - 13. "We will have a wide variety of work and projects represented at our booth," she said.

TICKETS ON SALE FOR NEXT "QSO TODAY VIRTUAL HAM EXPO," MARCH 12-13

ARRL Life Member Courtney Duncan, N5BF, will be the keynote speaker for the **QSO Today Virtual Ham Expo** on Saturday, March 12, in the QSO Today Virtual Ham Expo auditorium. The semi-annual virtual ham radio gathering will be live on March 12 – 13. Duncan will discuss the importance of amateur radio and technical hobbies in advancing global technology. Just retired from NASA's Jet Propulsion Laboratory (JPL), Duncan supported numerous missions involving digital and radio frequency hardware and software, most recently as telecommunications lead for the Ingenuity Mars Helicopter.

This edition of the QSO Today Virtual Ham Expo will showcase a wide range of topics with appeal to newcomers and veterans alike. It's a chance to update your amateur radio knowledge and get exposed to cutting edge ham radio technology as well as practical operating and building techniques. Like a live ham radio convention or hamfest, the Expo has presentations, exhibits, and state-of-the-art "lounges" for face-to-face interaction among participants.

Some 60 ham radio luminaries will address a multitude of topics, from DXpeditions to Solar Cycle 25. Some highlights include:

- Mike Crownover, AB5EB; Erwann Merrien, LB1QI, and Bill Straw, KO7SS, will discuss their plans to operate from **Bouvet Island** in November 2022.
- ARRL Central Division Director and ARRL Electromagnetic Compatibility Committee Chair Carl Luetzelschwab, K9LA, will present an **Update on Solar Cycle 25**.
- **Chasing DX During A Contest** is the subject of a presentation by Bill Salyers, AJ8B. He'll offer best practices, tools, and techniques to increase your chances of logging DX during operating events.

Because it's a virtual event, you don't have to pick and choose which presentations you can attend. You can watch any one of them within 30 days of the Expo as well as explore exhibitor offerings from the comfort of your computer or other device.

ARRL The National Association for Amateur Radio® is a QSO Today Virtual Ham Expo Partner.

"Early bird" tickets are \$10 through March 6 and then \$13.50 to the end of the on-demand period. Tickets include entry for the live, 2-day event and the 30-day on-demand period.

THE 5 MHZ NEWSLETTER MARKS 10 YEARS

The first edition of *The 5 MHz Newsletter* appeared in the autumn of 2011, heralding the growth of the new 60-meter band to serve as a propagation bridge between 40 and 80 meters. The newsletter, edited by Paul Gaskell, G4MWO, offers official news of new allocations and regulations as well as feedback from operators. The latest edition is No 28.

As a band, the US authorized a group of Experimental License operators to use 60 meters, while the UK discussed the issue, deciding that a number of channels could be feasible. UK hams had five 3-kHz wide channels to start.

Similarly, a band was not possible in the US, which settled on five channels. Other countries followed suit — sometimes with channels, sometimes a band, with a variety of power limits and modes. According to the newsletter, 85 countries currently have a presence on 60 meters. In 2017, the FCC invited comments on ARRL's *Petition for Rule Making* to allocate a new,

contiguous secondary band at 5 MHz to the Amateur Service in addition to four of the current five 60-meter channels (one would be within the new band) as well as current operating rules, including the 100 W PEP effective radiated power (ERP) limit. In the US, the federal government is the primary user of the 5 MHz spectrum. The FCC designated ARRL's *Petition* as RM-11785 but has not acted on it.

At last report, the Malaysian Amateur Transmitters Society (MARTS) said its telecommunications authority MCMC has approved a secondary 60-meter allocation based on the WRC-15 template. Radio amateurs there were waiting for formal paperwork to be completed before they could use the band. However, MCMC granted MARTS temporary licenses that permit the use of 60 meters for emergency communication and emergency communication drills.

"Hardly had this been granted than it was activated," the latest edition of the 5 MHz Newsletter reported. "During the MARTS Annual General Meeting on December 18, 2021, heavy rain began to fall, and MARTS activated its MDECC (MARTS Disaster and Emergency Communications Centre) under the call sign 9M4D. A significant number of Malaysian states were flooded, communities evacuated, and telecommunications lost. "The MDECC remained open for a number of days carrying their own as well as third-party traffic concerning situation reports and aid requests to the national disaster management agency," the newsletter said.

MARTS now is transmitting in WSPR mode "from time to time" on 5364.7 kHz as 9M4BQC. The authorization is temporary. The beacon has been heard in Australia, Austria, Belgium, Canary Island, China, Denmark, France, Germany, Hawaii, Italy, Luxembourg, Manchester, Netherlands, Norway, Poland, Russia, Sweden, UK, and in the US. Reception reports are welcome directly via WSPRnet or email. — Thanks to *The 5 MHz Newsletter*

ARISS SEEKS HOSTS FOR HAM RADIO CONTACTS WITH SPACE STATION CREW MEMBERS

Amateur Radio on the International Space Station (ARISS) is accepting applications until March 31 from US schools, museums, science centers, and community youth organizations (working individually or together) interested in hosting contacts with International Space Station (ISS) crew members. Contacts will be scheduled between January 1 and June 30, 2023. Proposal information and additional details are available on the ARISS-USA website.

ARISS is looking for organizations capable of attracting large numbers of participants and integrating the contact into a well-developed education plan.

ARISS contacts afford participants the opportunity to learn firsthand from astronauts what it's like to live and work in space. The program's goal is to inspire students to pursue interests and careers in science, technology, engineering, and mathematics.

Students can learn about satellite communications, wireless technology, scientific research on the ISS, radio science, and related topics. They'll also learn how to use amateur radio to talk directly to an ISS crew member. Contacts are approximately 10 minutes long.

ARISS will help educational organizations to locate amateur radio groups that can assist contact hosts with equipment and operational support. Because of the nature of human spaceflight and the complexity of scheduling activities aboard the ISS, host schools and organizations must demonstrate flexibility to accommodate changes in dates and times.

An ARISS introductory webinar will be held on March 4, at 0100 UTC (the evening of March 3 in North American time zones). Registration is required.

Direct questions to ARISS-USA.

ARRL ANNOUNCES NEW WORLD WIDE DIGITAL CONTEST

The ARRL International Digital Contest will debut at 1800 UTC on June 4, ending at 2359 on June 5, 2022. All non-RTTY modes are permitted. Going forward, RTTY will be the sole mode for the ARRL RTTY Roundup, which will continue to take place in January.

In broad strokes, this will be an HF – 6-meter event, on 160, 80, 40, 20, 15, 10, and 6 meters, with single-operator and multi-single entry categories. These are Single Operator, One Radio (SO1R), Single Operator, Two Radio (SO2R), and Multi-Single (MS). Overlays in the single-operator categories will include “all enclosed antennas” and “maximum of 8 operating hours.” Single-operator entries may operate for 24 hours (with off times taken in one or two breaks that are at least 60 minutes long), while MS entries may operate for the full 30 hours.

Operating assistance is permitted for all operating categories.

Power categories will be QRP (5 W transmitter output or less) and low-power (maximum 100 W PEP transmitter output).

The exchange for the International Digital Contest will be a station’s four-character grid square designation. Stations may work each other once per band, regardless of digital mode. Participants will earn 1 point for each contact, plus 1 point for each 500 kilometers (310 miles) between stations. So, a contact between stations 1,000 kilometers apart would be worth 3 points. The total score is total contact points.

ARRL makes available a grid-center distance calculation tool. Options include kilometers (always rounded up), distance between pairs, and points.

For instructions on how to submit logs, visit the ARRL Contest page. Logs will be due 7 days after the event has concluded.

In succeeding years, the International Digital Contest will take place on the first full weekend of June.

Full details on the new operating event are on the ARRL website.

APRS DEVELOPER BOB BRUNINGA, WB4APR, SK

The creator of the Automatic Packet Reporting System (APRS), Bob Bruninga, WB4APR, of Glen Burnie, Maryland, died on February 7. An ARRL Life Member, Bruninga was 73. According to his daughter, Bruninga succumbed to cancer and the effects of COVID-19. Bruninga had announced his cancer diagnosis in 2020. Over the years, he readily shared his broad knowledge of and experience with APRS, among other topics in the amateur radio and electronics fields.

While best known for APRS, Bruninga was also a retired US Naval Academy (USNA) senior research engineer who had an abiding interest in alternative power sources, such as solar power. In 2018, he authored *Energy Choices for the Radio Amateur*, published by ARRL, which explores developing changes in the area of power and energy, and examines the choices radio amateurs and others can make regarding home solar power, heat pumps, and hybrid and electric vehicles. Bruninga drove an all-electric car and had experimented with a variety of electric-powered vehicles over the years.

APRS originated in 1982, when Bruninga wrote his first data map program that plotted the positions of US Navy ships for the Apple II platform. A couple of years later, he developed what he called the Connectionless Emergency Traffic System (CETS) on the VIC-20 and C64 platforms for digital packet communications to support an endurance race. The program was ported to the IBM PC platform in 1988, and was renamed APRS in 1992. The recognized North American APRS frequency is 144.39 MHz, and APRS is globally linked via the internet. Bruninga founded the Appalachian Trail Golden Packet (ATPG) event, which fields APRS nodes from Stone Mountain in Georgia to Mount Katahdin in Maine each July.

ARRL Contributing Editor Ward Silver, N0AX, remembered Bruninga this way: "Bob kept pushing APRS beyond its origins as a position reporting system. He developed and helped implement numerous other uses of APRS in support of what has become the 'Ham Radio of Things,' with great potential for future amateur radio applications. Bob's far-reaching vision and imagination were as good as it gets."

Bruninga mentored USNA midshipmen in building and launching amateur radio satellites and CubeSats, beginning with PCsat in 2001. PCsat was the first satellite to directly report its precise position to users via its onboard GPS module. Subsequent USNA spacecraft included PSK31 capability (HF to UHF) and other innovations.

Amateur Radio on the International Space Station (ARISS) ARRL liaison Rosalie White, K1STO, recalled that Bruninga attended many ARISS-International meetings and contributed "enormously" to ARISS APRS activities, leading a team in developing protocols and software for rapid message exchange via a packet "robot."

White said APRS remains a key staple in the new ARISS InterOperable Radio System (IORS) that's now on board the ISS. She added that Bruninga offered input for future NASA Lunar and Gateway opportunities in which ARISS hopes to take part.

Last year, ARRL CEO David Minster, NA2AA, on behalf of ARRL, honored Bruninga with a brick in the ARRL Diamond Club Terrace at ARRL Headquarters. ARRL sent him a letter of appreciation along with a replica of the brick.

Bruninga held a bachelor's degree in electrical engineering from Georgia Tech (Georgia Institute of Technology) and a master's degree in electrical engineering from the Naval Postgraduate School. Bruninga was a 20-year US Navy veteran. Dayton Hamvention® honored him in 1998 with its Technical Excellence Award.

Bruninga authored and co-authored numerous academic papers over the years, and was frequently in demand as a speaker and presenter at amateur radio gatherings.

Survivors include his wife, Elise Albert; daughter, Bethanne Bruninga-Socular, WE4APR, and son A.J. Bruninga, WA4APR. Arrangements are pending, although his daughter said that a celebratory memorial service will be held this summer in Annapolis, Maryland.

TEN TEC PARTS AND SERVICE IS DISCONTINUED IN SEVIERVILLE

Undoubtedly everyone has heard of the so called "chip" shortage by now. The shortage isn't just microprocessors and memory but extends to all levels of the electronics industry, even including even very basic parts such as linear voltage regulators.

No one has ever seen anything like this in the history of the electronics industry. The status of some critical parts like DSP processors are unknown if they will be produced again. Other parts like encoders are 36 weeks delivery. Some microcontrollers are showing more than a year delivery. Some transistors are showing 67 weeks delivery! It isn't possible to repair units or build radios without parts. Irate customers are calling and emailing Dishtronix and complaining that units are not repaired and demanding returns. All repair radios are being returned to respective owners unrepaired. We do not have recommendations for anyone to do repairs. The inventory is not for sale.

As there are no guarantees that the shortages won't extend further into the future, there is no alternative except to suspend operations in Sevierville. Unfortunately we will no longer be able to answer email or telephone calls regarding Ten Tec amateur radio products. Ten Tec is not out of business. We are developing new products and will introduce them if and when we can obtain components. When we have resources, we might put some of the parts online in the parts store, but this will not be anytime soon.- HDXCC

HEIL SOUND CHANGES HANDS

Heil Sound has changed hands. Founded by Bob Heil, K9EID, and based in Fairview Heights, Illinois, Heil Sound is a manufacturer of microphones, microphone accessories, and audio accessories for both professionals and amateurs. The new owners are Heil Sound President and CEO Ash Levitt and Director of Operations Steve Warford. Sarah Heil, who was co-owner of Heil Sound, has retired, but Bob Heil will continue to do outreach work and amateur radio product design as Founder and CEO Emeritus.

"My life has been about achieving great sound, whether on the concert stage or in the amateur radio world," Bob Heil recounted. "I've watched Heil Sound go from a regional sound company to a world-class microphone manufacturer. This company has been my passion, but it is time for me to step aside. There is no better team to carry the company forward than Ash and Steve, and I have the utmost confidence in them."

Heil Sound is a name well known within the worldwide amateur radio community for its microphones and "boom set" microphone/headset combinations. The company marked its 50th anniversary in 2016. The company began in 1966 as Ye Olde Music Shoppe — a music store in Marissa, Illinois, Heil's hometown.

Heil initially made a name for himself working with music performers to provide sound reinforcement for their live gigs, initially supplying full sound system packages for venues and festivals throughout the Midwest and later working with world-class acts such as Humble Pie, The Who, The Grateful Dead, and Joe Walsh, WB6ACU. Heil said it was the Dead's Jerry Garcia who suggested the Heil Sound name. Among other innovations, Heil created the quadraphonic sound system for The Who's "Quadrophenia" tour as well as the Heil Talk Box, made famous by Joe Walsh and Peter Frampton.

Levitt and Warford both started working with Heil Sound as teenagers, building and packaging products. Levitt took a different career path in academia for several years but continued to regularly consult with Heil Sound. He returned to Heil Sound full time in 2017 and assumed the role of president in 2020. Warford worked his way up in the company over the course of his tenure and, for the past several years, has been responsible for daily operations.

"Steve and I are honored to carry forward the legacy of Heil Sound," Levitt said. "We care very deeply about Heil Sound's role in the industry and intend to build on that going forward with new products and greater distribution. An important part of that role that we pride ourselves on is the connection we have with professionals and end-users. As a musician and former broadcaster, I have spent a lot of time on stages and in studios in front of a microphone and understand our users' needs. I and everyone at Heil Sound share a passion for what we do because it helps others achieve their creative endeavors."

ARRL INTERNATIONAL DX CONTEST TO INCLUDE NEW CATEGORIES, RULE CHANGES FOR 2022

Operators planning to participate in the [ARRL International DX Contest](#) should be aware of some new entry categories and rule changes. The CW edition has already concluded. The SSB contest starts at 0000 UTC on Saturday, March 5 (Friday evening, March 4 in North American time zones), and concludes at 2359 UTC on Sunday, March 6.

New this year: The Single-Operator, Single-Band (SOSB) category has been expanded to include *three* power level subcategories -- QRP (5 W PEP output or less), Low Power (100 W PEP output or less), and High Power (1,500 W PEP output or the maximum allowable power level established by the national licensing authority issuing the operator and/or station license, whichever is less) -- for both Non-Assisted and Unlimited (Assisted) entries.

Also new for the ARRL DX 2022 Affiliated Club Competition, multioperator DXpedition scores -- operations from outside the US and Canada -- may be distributed among Medium and Unlimited

category clubs that each operator declares. To be eligible to receive the scores, the club must be active in the ARRL's Club Eligibility listing, and the operator's call sign must be included in the club's eligibility list. Each eligible operator's portion of the total station score will be attributed to the club of their choosing. The [Affiliated Club Competition](#) rules include more details.

In addition, multioperator station accommodations put in place for 2021 have been extended to the 2022 running of the event. This permits multioperator station participants to operate from their home stations in conjunction with a multioperator station. The home stations must be within 100 kilometers (62 miles) of the multioperator station and must be within the same DXCC entity, US state, or Canadian province.

Complete [rules and more information](#) are available on the ARRL website.

SOME NEW RULES GOING INTO EFFECT THIS YEAR FOR ARRL FIELD DAY

After taking a few detours over the past couple of years due to the COVID-19 pandemic, ARRL Field Day rules are being updated on a permanent basis starting this summer. ARRL conducted a Field Day community survey with invitations propagated far and wide, and direct emails sent to more than 15,000 individuals and ARRL-affiliated clubs. After sorting through, reviewing, and discussing the survey results, the ARRL Programs and Services Committee recommended a number of rule changes for ARRL Field Day, which will take place this year over the June 25 – 26 weekend.

Starting this year, the maximum PEP output for a transmitter used by anyone submitting a Field Day log will be 100 W. The power multiplier of 2 will remain in place, and the high-power category will be removed from the rules. Until this year, the maximum low-power limit had been 150 W for most ARRL-sponsored operating events. The power multiplier will remain at 5 for QRP participants running a maximum of 5 W or less. As previously announced, 100 W is now the low-power category limit for all ARRL and IARU HF Contests, effective January 1, 2022.

A couple of changes instituted initially as accommodations for the COVID-19 pandemic will remain. Class D (Home) stations will continue to be able to earn points for contacts with other Class D stations. The club aggregate scoring change initiated in 2020 as a temporary measure will become part of the permanent rules. In the aggregate scoring plan, the scores of individual stations are combined under the score of a single club.

Another change, involving Rule 7.3.2 Media Publicity, has been modified. Rules to date have offered 100 bonus points for attempting to obtain publicity and demonstrating same. With the ease of posting via Facebook, Twitter, Instagram, and various other media websites, Field Day participants will now be required to obtain publicity, not just try to do so. Any combination of bona fide media hits would qualify for the bonus points. For example, posting the details of your upcoming or ongoing Field Day activity, or your Field Day results, on a club or news media site, on Facebook, or via Twitter and Instagram would meet the bonus criteria. Photos and videos are encouraged as part of media posts. --ARRL

SHORTS

New rules go into effect in June for all ARRL HF Contests. Starting with the ARRL International Digital Contest, the use of online and other non-amateur radio platforms including -- but not limited to -- social media, live video streaming, and internet chat rooms will be permitted in all categories that allow assistance (Unlimited). In all Unlimited and Multioperator categories, the prohibitions against self-spotting and asking another station to spot you will also be removed.

Packet Pioneer Brian Rogers, N1URO, SK - Packet Radio Pioneer Brian Rogers, N1URO, of Unionville, Connecticut, died on January 4. An ARRL member, he was 58. Rogers was considered a core contributor to amateur packet radio dating to the 1990s. Licensed in 1995, he focused on classic packet and 802.11/high-speed protocols, developed the *URONode* packet radio software, and was an avid packet user and contributor to various software packages. Professionally, he was an IT consultant and the proprietor of Continuum Connecticut.

ViewProp Tutorial Video Released - Rick Kiessig, ZL2HAM, has published a tutorial for his propagation analysis and visualization tool, *ViewProp* on YouTube. *ViewProp* uses data from *Reverse Beacon Network* and *DxAtlas* to provide a graphical view of propagation.

You can view the video at youtube.com/watch?v=McUB2eY5atk. A user forum and discussion group for *ViewProp* is also available at groups.io.

W1AW has received a complete 2-meter FM and VARA FM Winlink 2000 system from the Hawaii Emergency Amateur Radio Network, Inc. (HEARDn). This system will replace the current 2-meter WL2K equipment operating on 145.510 MHz (W1AW-10). The call sign used and frequency will remain the same. Thanks to HEARDn for the donation!

Brian Moran, N9ADG, notes an [article](#) in *Quanta Magazine* that reveals what triggers lightning. Physicists turned to an array of small radio telescopes, primarily in the Netherlands, to capture radio pulses emitted for each lightning flash. The Low Frequency Array, a state-of-the-art astronomical telescope, can map lighting in three dimensions, and with a frame rate 200 times faster than previous instruments could achieve.

Norway's [NRRL](#) has announced its supports for the 3Y0J Bouvet Island DXpedition in November 2022. NRRL will allocate NOK 20,000. LA7GIA, LA7THA, and LB1QI are co-leaders of the DXpedition.

Packet Program for computers - Dire Wolf is a software "soundcard" AX.25 packet modem/TNC and APRS encoder/decoder. It can be used stand-alone to observe APRS traffic, as a tracker, digipeater, APRStt gateway, or Internet Gateway (lgate). For more information: <https://github.com/wb2osz/direwolf/blob/dev/doc/README.md> and <https://github.com/wb2osz/direwolf>

Amateur Radio on the International Space Station ([ARISS](#)) has announced that a Russian Progress re-supply ship recently delivered an additional ARISS Kenwood TM-D710GA transceiver for installation in the ISS Service Module. The radio will allow ARISS to broaden the scope of its activities and provide identical radios in both the Service and Columbus modules.

THANKS FOR READING

THE RCA ARC MONTHLY NEWSLETTER IS COMPILED AND EDITED BY JIM RINEHART, K9RU AND JIM KEETH, AF9A. ALL MATERIAL CONTAINED HEREIN IS OBTAINED FROM THE SOURCES CREDITED AND EDITED FOR THIS NEWSLETTER. EMAIL TO mail to: WebMaster@w9rca.org. Check our web site at <http://www.w9rca.org>
